

REMARKS

The applicant appreciates the Examiner's thorough examination of the application and requests reexamination and reconsideration of the application in view of the preceding amendments and the following remarks.

The applicant has amended the specification through the above amendments to correct two typographical errors. Specifically, the applicant corrected the reference number for one of the elements to be consistent with the specification and drawings. No new matter is added by these amendments.

The Examiner rejects claims 1-4, 6-7, 10, 12, 16-18, 20, 24-28 and 30-33 under 35 USC § 103(a) as being unpatentable over U.S. Publication No. 2003/0007795 to *Grober* in view of JP Publication 06-141211 to *Sosoya*.

Claim 1 of the subject application is directed to a photonic buoy comprising a lengthy hull including a ballast portion of the hull which resides below the waterline and a top portion of the hull which is disposed above the waterline, an optical bench including an imager within the top portion of the hull, the optical bench configured to provide a panoramic view of the horizon, and a transmission cable extending from the optical bench for transmitting video signals to a remote location.

Grober is directed to a stabilized camera and marker buoy for media coverage of aquatic events. *Grober* includes a floating platform 1 for supporting stabilized head 4, camera 5, ground tackle system 9, motion reduction system 11, propulsion system 12, and a camera operator. See page 2 [0017] of *Grober*. The Examiner states that *Grober* discloses a lengthy hull including a ballast portion (motion reduction system 11) which resides below the waterline and a top portion which is disposed above the waterline, and an optical bench (lens of camera 5) at the top portion of

the hull configured to provide a view of the horizon. The Examiner also states that *Grober* fails to disclose the optical bench configured to provide a panoramic view of the horizon or the transmission cable for transmitting video signals to a remote location, but that such features are disclosed in *Sosoya*.

However, *Grober* also fails to disclose additional features of the applicant's claimed invention. Applicant claims a lengthy hull including a ballast portion of the hull which resides below the water line and a top portion of the hull which is disposed above the waterline. These features are present in all of the applicant's independent claims. The Examiner alleges that the motion reduction system 11 of *Grober* is equivalent to the ballast portion. However, as clarified through the above amendments to the claims, the applicant's lengthy hull includes a ballast portion of the hull. Motion reduction system 11 of *Grober* clearly is not a portion of the hull as claimed by the applicant, but is merely connected to the floating platform of *Grober*. *Grober* clearly fails to disclose a ballast portion of the hull as claimed by the applicant. In fact, *Grober* fails to disclose a lengthy hull at all as claimed by the applicant.

Additionally, the applicant also claims an optical bench including an imager within the top portion of the hull. The Examiner asserts that the lens of camera 5 is the optical bench of *Grober*. However, the lens of camera 5, and in fact the entire disclosure of *Grober*, does not disclose an imager within the top portion of the hull as claimed by the applicant. No portion of camera 5 of *Grober* is located within any type of hull whatsoever.

As stated above, *Grober* fails to disclose a lengthy hull; a ballast portion of the hull which resides below the waterline and a top portion of the hull which is disposed above the waterline; and an optical bench including an imager within the top portion of the hull as claimed by the applicant. *Sosoya* also fails to disclose each of these features. Accordingly, the combination of references

would not render the applicant's claims unpatentable.

The applicant also submits that there is no motivation, teaching or suggestion in *Grober* to include the features of applicant's claimed invention, and in fact, *Grober* teaches away from the applicant's claimed invention. *Grober* is merely a camera and marker buoy for media coverage of aquatic events which is designed to be seen by passing vessels and their crews. Indeed, *Grober* states that the floating platform can be large enough to support a camera operator. See paragraph [0017] of *Grober*. Thus, *Grober* teaches away from a lengthy hull including a ballast portion of the hull and a top portion of the hull with an optical bench including an imager within the top portion of the lengthy hull.

Accordingly, the applicant submits that the combination of references fails to result in the applicant's claimed invention. Additionally, not only is *Grober* devoid of any disclosure, teaching or suggestion to include the applicant's features, *Grober* teaches away from such a combination. Therefore, claims 1-4, 6-7, 10, 12, 16-18, 20, 24-28 and 30-33 are patentable over the references.

The Examiner also rejects claims 5, 19 and 29 under 35 USC § 103(a) as being unpatentable over *Grober* in view of *Sosoya* and U.S. Patent No. 5,018,852 to *Cheng*. However, independent claims 1, 12 and 25 are patentable for at least the reasons set forth above. Accordingly, dependant claims 5, 9, and 29 are patentable for at least these reasons.

The Examiner also rejects claims 8-9, 11, 13-14 and 22-23 under 35 USC § 103(a) as being unpatentable over *Grober* in view of *Sosoya* and U.S. Patent No. 4,794,575 to *Miller*. However, independent claims 1, 12 and 25 are patentable for at least the reasons set forth above. Accordingly, dependant claims 5, 9, and 29 are patentable for at least these reasons.

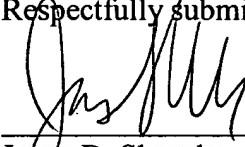
The Examiner also rejects claim 15 under 35 USC § 103(a) as being unpatentable over *Grober* in view of *Sosoya* and U.S. Patent No. 5,973,733 to *Gove*. However, independent claims 1,

12 and 25 are patentable for at least the reasons set forth above. Accordingly, defendant claims 5, 9, and 29 are patentable for at least these reasons.

Each of the Examiner's rejections has been addressed or traversed. Accordingly, it is respectfully submitted that the application is in condition for allowance. Early and favorable action is respectfully requested.

If for any reason this Response is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance prosecution, please telephone the undersigned or his associates, collect in Waltham, Massachusetts, (781)890-5678.

Respectfully submitted,



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